

# Analysis of the state and methods for increasing the efficiency of operation of district heating system in the Chisinau municipality

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**Abstract.** A centralized system for thermal energy supply in Chisinau (CSTES) comprises thermal energy sources, namely two Combined Heat and Power stations (CHP) - Source1 and Source2 and two Heating Plants (HP West and HP South). Thermal energy transport and distribution from the above mentioned sources is provided through the appropriate loops by means of thermal thoroughfare network, distribution and in-house. In CSTES they continue to use the adjustment of the temperature of thermal agent related to the load graph maintaining a constant flow rate. Such a regime is called quality regime of adjustment of the thermal load. The main task is in the transfer to the method of quality-and-quantity adjusting of thermal agent supply related to the outdoor temperature and to the thermal load. At the same time, the operation of all the sources to one common loop has been proposed. This will identify a main objectives in the successful choosing of the sources, network as well as the computation of optimal regimes of operation.

**Key words:** centralized system for thermal energy supply, quality adjusting mode, quality-and-quantity adjusting mode, energy efficiency.

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